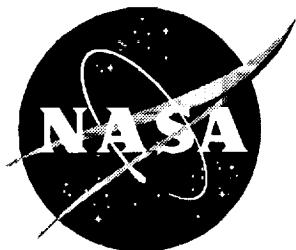


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NASA Langley Scientific and Technical Information Output—1999

*Susan H. Stewart and Harriet B. Machie, Compilers
Langley Research Center, Hampton, Virginia*

February 2000

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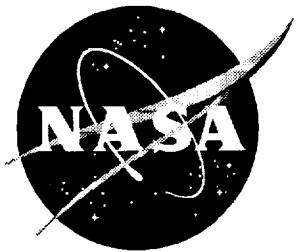
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NASA Langley Scientific and Technical Information Output—1999

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National Aeronautics and
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Preface

This report contains a listing of the NASA Langley Research Center's publicly available scientific and technical research output for C.Y. 1999.

The intent of this report is to provide a greater awareness of the broad scope of results and the importance of the research and development work conducted by scientists and engineers at Langley. This current awareness is mandated by the National Aeronautics and Space Act of 1958, which provides for the widest practical dissemination of NASA research.

During C.Y. 1999, Langley's contributions to NASA and non-NASA literature included 3 Special Publications, 15 Technical Publications, 19 Conference Publications, 82 Technical Memorandums, 116 Contractor Reports, 187 Journal Articles and Book Publications, 554 Meeting Presentations, 43 Technical Talks, 11 Tech Briefs, and 28 Patents.



Introduction

The NASA Langley Research Center is one of the Nation's leading laboratories for research and development in the sciences of aeronautics and space technology. Langley conducts basic and applied research in the areas of aerospace systems, concepts, and analysis, aerodynamics, aerothermodynamics, and acoustics, structures and materials, airborne systems, atmospheric sciences, and systems engineering.

This document contains a bibliography of Langley's publicly available scientific and technical research output for 1999 which is processed through the Center's Office of the Chief Information Officer to become an integral part of NASA's Agency-wide Scientific and Technical Information (STI) system. The results of Langley's research are disseminated in a variety of NASA and non-NASA scientific and technical media and information systems. This document is intended to be a reference summary for researchers and a current awareness publication for the scientific, research, and academic community. Details of the availability of the research references in this document are found in the section, "Availability," on page vi.

Many Langley reports are available electronically on the Langley Technical Report Server (LTRS) at <http://techreports.larc.nasa.gov/ltrs/ltrs.html> or the Institute for Computer Applications in Science and Engineering (ICASE) Technical Report Server (ITRS) at <http://www.icase.edu/docs/library/itrs.html> via the World Wide Web (WWW). The relative Uniform Resource Locators are noted below citations for reports available electronically.

The citations are grouped by the Scientific and Technical Aerospace Reports (STAR) subject categories and listed alphabetically by author or innovator. The Langley organization to which the senior author or innovator is assigned and the Research and Technology Objectives and Plans (RTOP) number are noted below citations when appropriate and included in the indexes.

Patents listed are those which were issued in 1999 and owned by Langley Research Center.

Publication of some journal articles was not known at press time for the 1998 issue of this document. These articles are therefore listed in the 1999 issue.

Availability

<u>Category</u>	<u>Source</u>
NASA Reports	NASA Center for AeroSpace Information (CASI) 7121 Standard Drive Hanover, MD 21076-1320 (301) 621-0390
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Scientific and Technical Publications

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- 1 Atkins, H. L.; and Lockard, D. P.: A High-Order Method Using Unstructured Grids for the Aeroacoustic Analysis of Realistic Aircraft Configurations. Presented at 5th AIAA/CEAS Aeroacoustics Conference, May 10-12, 1999, Bellevue, Washington. AIAA Paper No. 99-1945.
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